

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 10779 - L2 Version 2
Chandra X-Ray Center

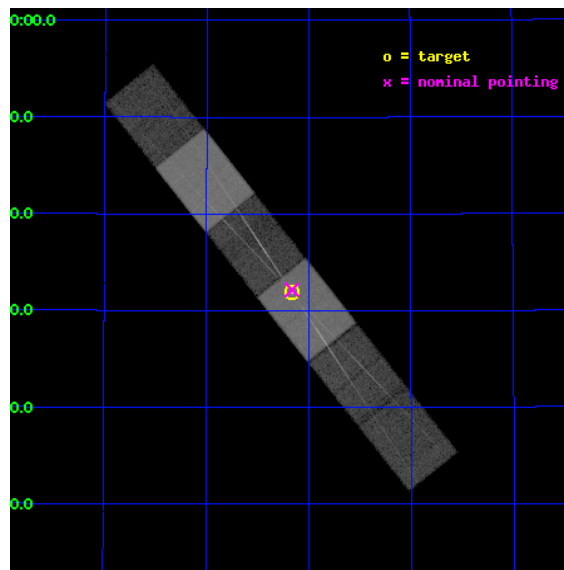
L2 Processing Date : May 24 2012

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1 Front

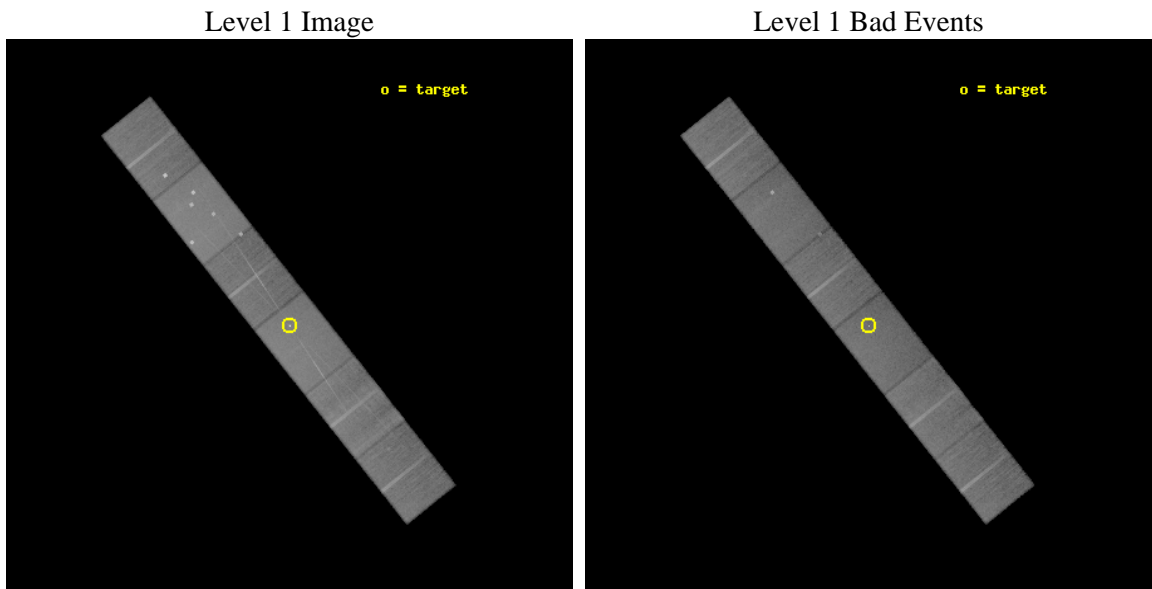
seq_num	701946	Sequence number
obs_id	10779	Observation id
title	Deconstructing AGN X-ray Spectra - Time for a Paradigm Shift?	Prop
observer	Dr Tracey Turner	Principal investigator
object	NGC 4051	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	180.79	Observer's specified target RA [deg]
dec_targ	44.531333	Observer's specified target Dec [deg]
ra_nom	180.79081092772	Nominal RA [deg]
dec_nom	44.53613886657	Nominal Dec [deg]
roll_nom	51.483996879585	Nominal Roll [deg]
revision	2	Processing version of data
ontime	27755.0	Sum of GTIs [s]
liveltime	27306.732676384	Livetime [s]
ontime4	27755.0	Sum of GTIs [s]
ontime5	27755.0	Sum of GTIs [s]
ontime6	27755.0	Sum of GTIs [s]
ontime7	27755.0	Sum of GTIs [s]
ontime8	27755.0	Sum of GTIs [s]
ontime9	27755.0	Sum of GTIs [s]
l2events	391586	Number of level 2 events



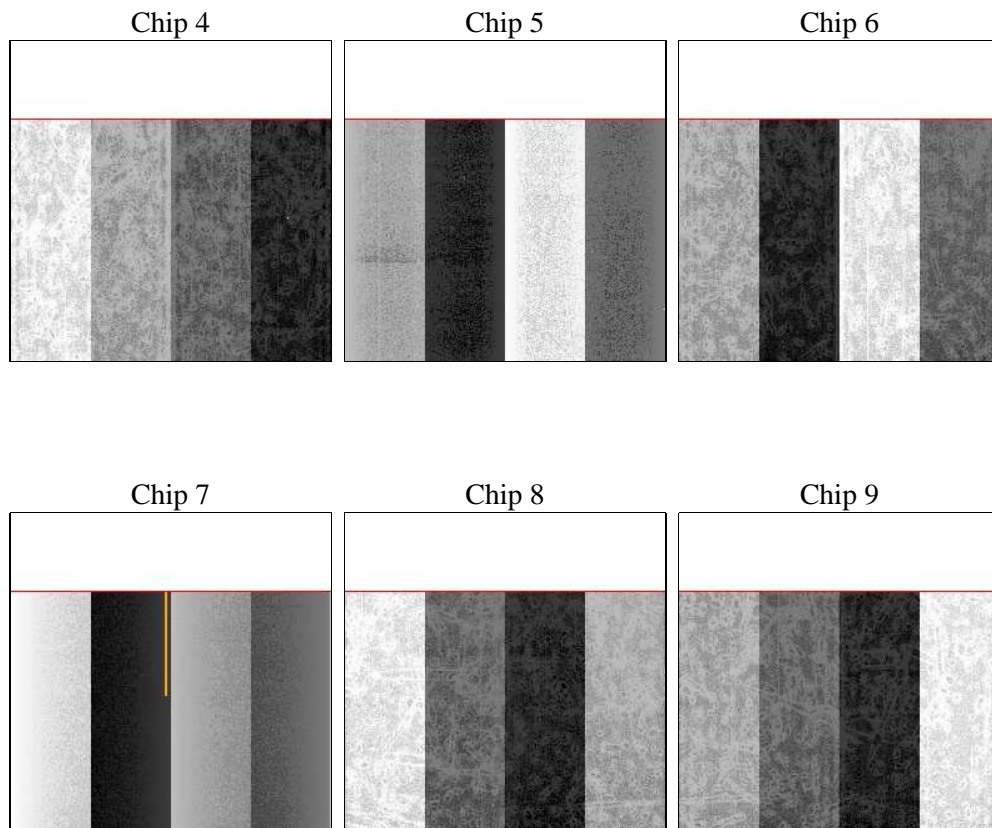
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	28000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	27755.0	Sum of GTIs [s]
caldbver	4.4.9	 	ontime4	27755.0	Sum of GTIs [s]
date	2012-05-24T04:33:06	Date and time of file creation	ontime5	27755.0	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	27755.0	Sum of GTIs [s]
			ontime7	27755.0	Sum of GTIs [s]
			ontime8	27755.0	Sum of GTIs [s]
			ontime9	27755.0	Sum of GTIs [s]
			l1events	1625737	Number of level 1 events

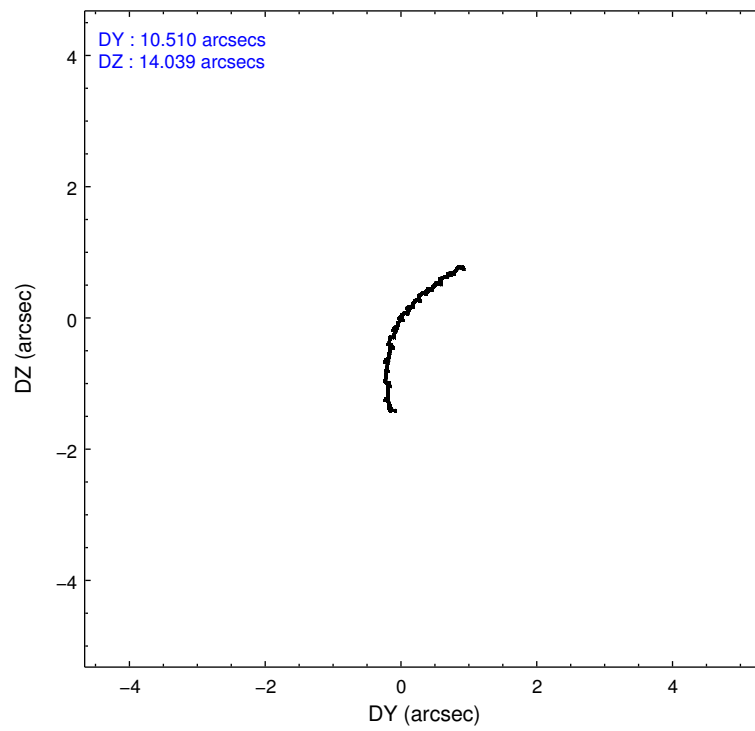
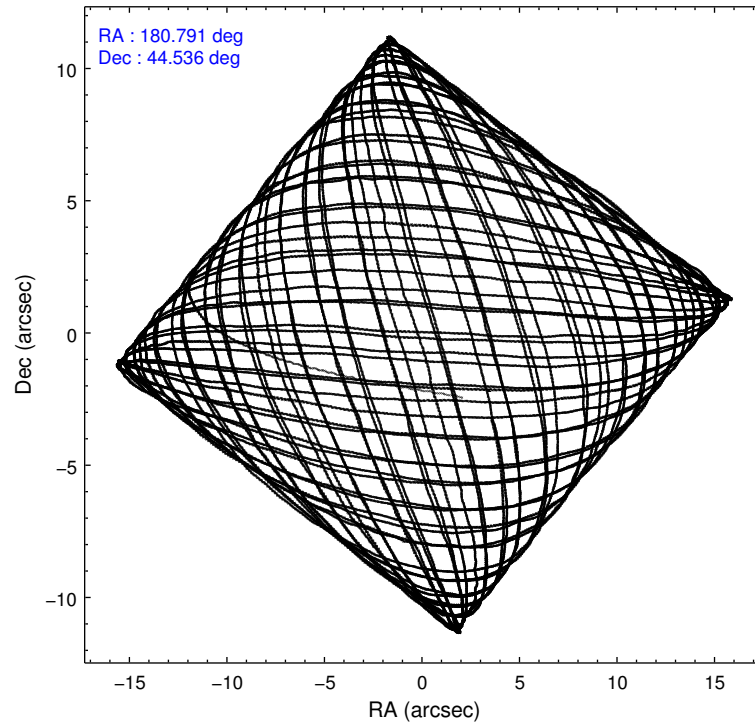
2.1.4 Events

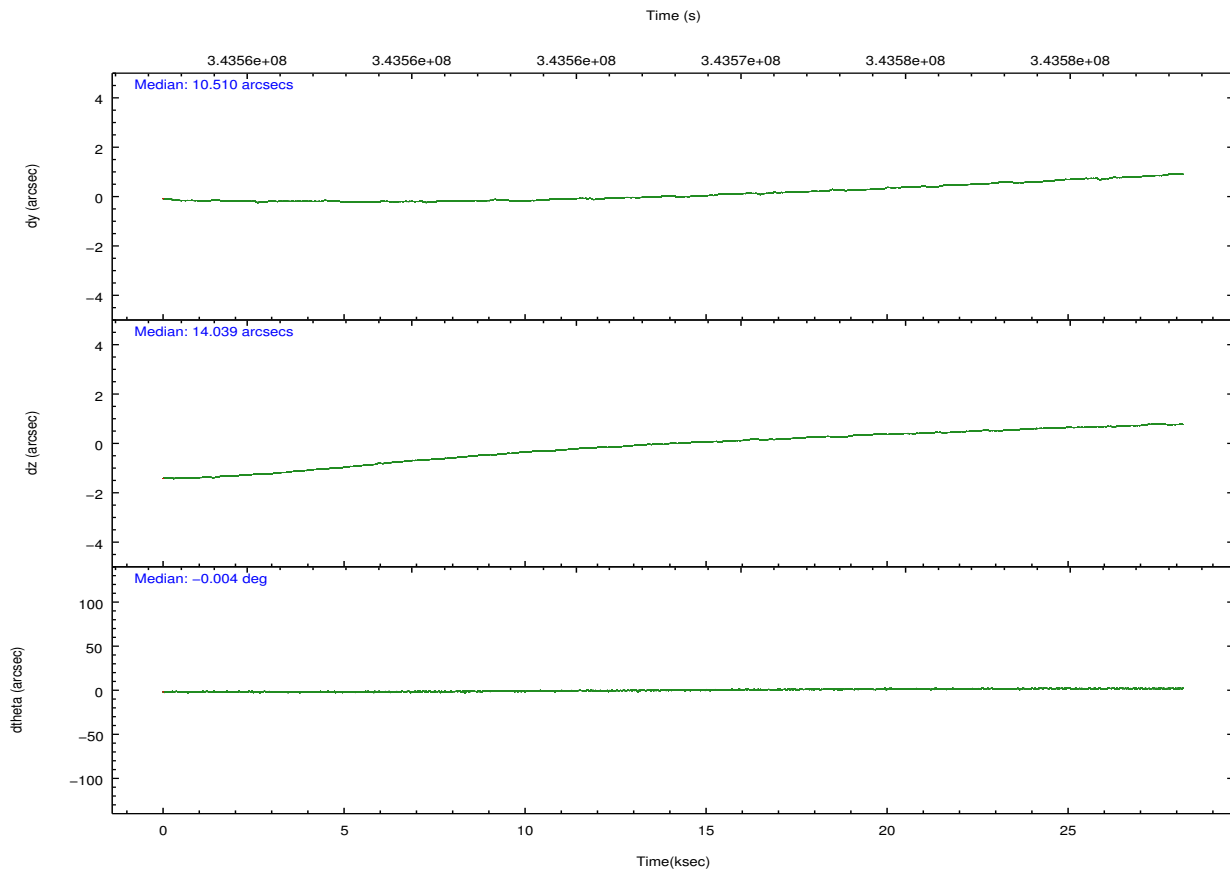
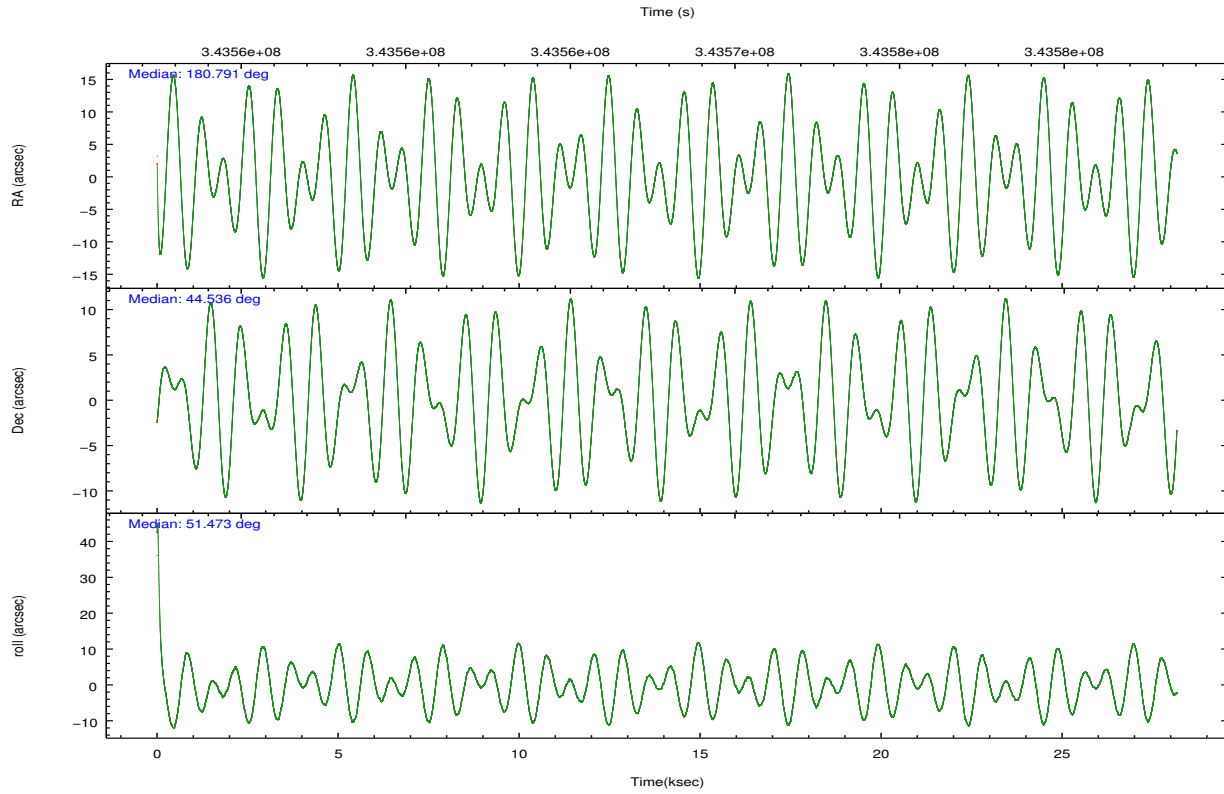
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	245383	353488	223074	313384	278130	212278	grade 0 events	21299	27181	16260	13783	23555	11990
rejected events	208023	182383	188838	174401	209446	184031		8%	7%	7%	4%	8%	5%
rejected %	84%	51%	84%	55%	75%	86%	grade 1 events	249	854	117	473	212	146
								0%	0%	0%	0%	0%	0%
							grade 2 events	6161	48646	6660	29205	14880	5473
								2%	13%	2%	9%	5%	2%
							grade 3 events	2790	6406	2895	12415	6883	2767
								1%	1%	1%	3%	2%	1%
							grade 4 events	2707	6300	2879	12134	6368	2689
								1%	1%	1%	3%	2%	1%
							grade 5 events	9910	24954	10131	28637	13504	10835
								4%	7%	4%	9%	4%	5%
							grade 6 events	4408	82601	5551	71472	17005	5334
								1%	23%	2%	22%	6%	2%
							grade 7 events	197859	156546	178581	145265	195723	173044
								80%	44%	80%	46%	70%	81%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-456789	ACIS-456789	Obspar file type	PREDICTED	ACTUAL
Grating	HETG	HETG	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	180.785661	180.7908109277159	CCD I2 on	N	N
[deg] Pointing Dec	44.509047	44.53613886657039	CCD I3 on	N	N
[deg] Pointing Roll	51.330962	51.48399687958541	CCD S0 on	O1	Y
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-187.132523	-187.1228876879999	CCD S3 on	Y	Y
[mm] SIM translation stage offset	-3	-3.009634895007935	CCD S4 on	Y	Y
[s] Observation start time (MET)	343554029.184000	343552959.75716	CCD S5 on	Y	Y
Observation start date	2008-11-20T07:39:24	2008-11-20T07:22:39	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	343582029.184000	343582856.95864	On-chip summing requested	N	N
Observation end date	2008-11-20T15:26:04	2008-11-20T15:40:56	Subarray requested	CUSTOM	CUSTOM
Read mode	TIMED	TIMED	Subarray start row	1	1
			Subarray row count	774	774
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	2.5

2.3 Aspect



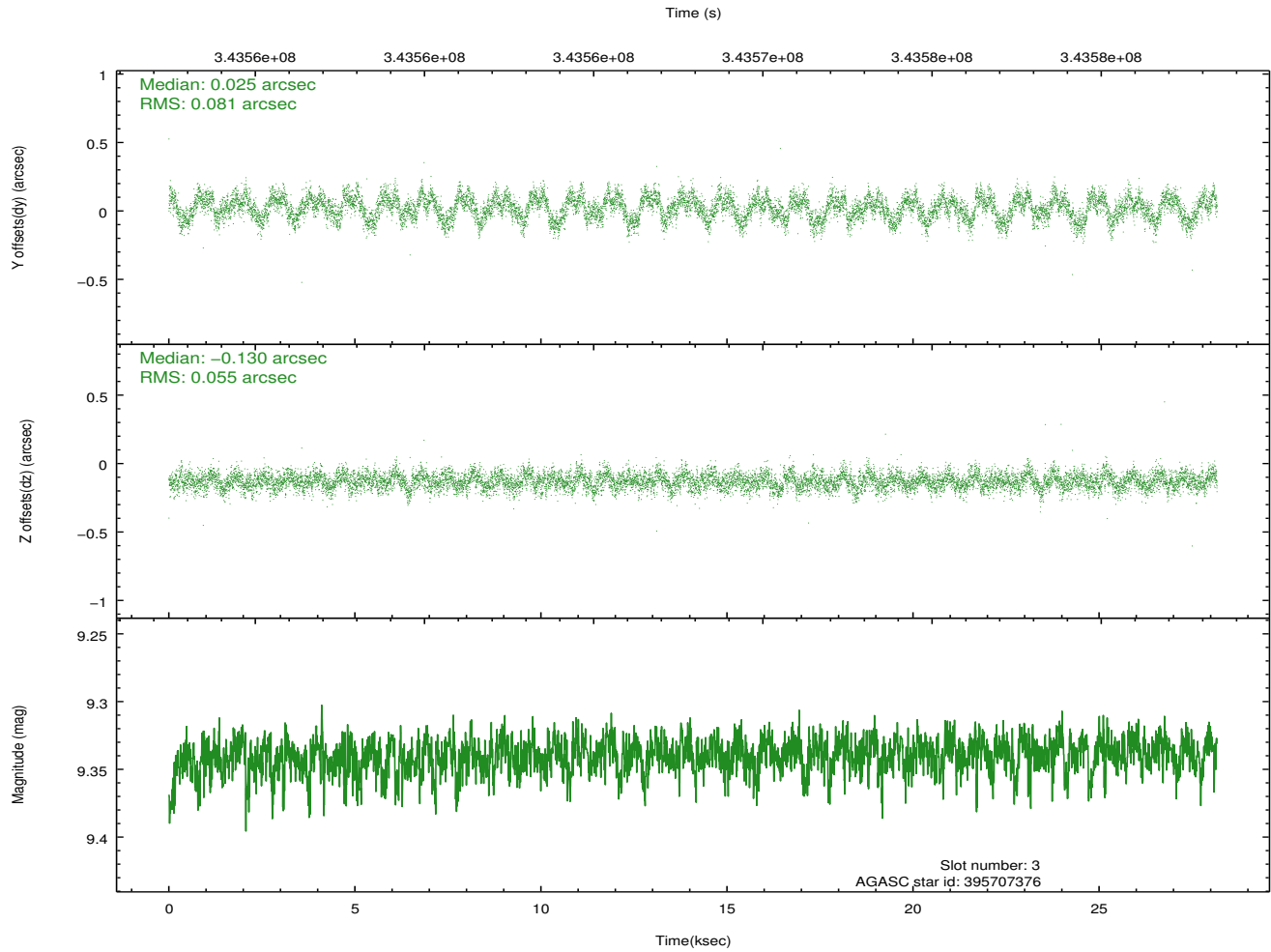
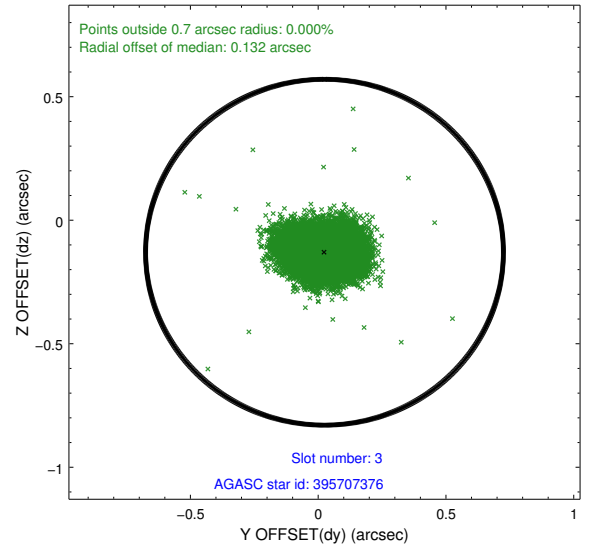
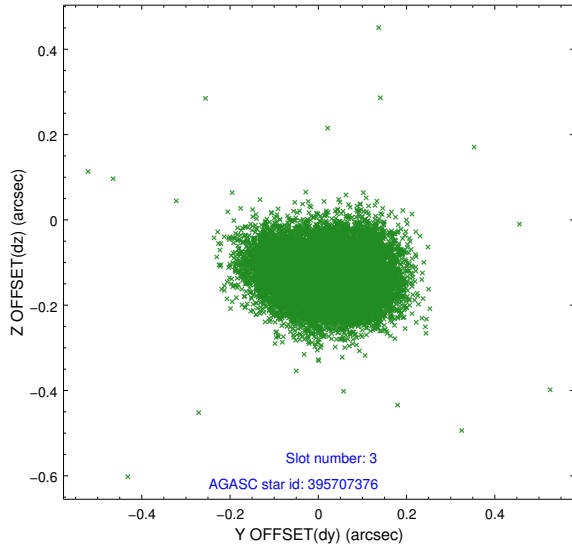


Slot Statistics

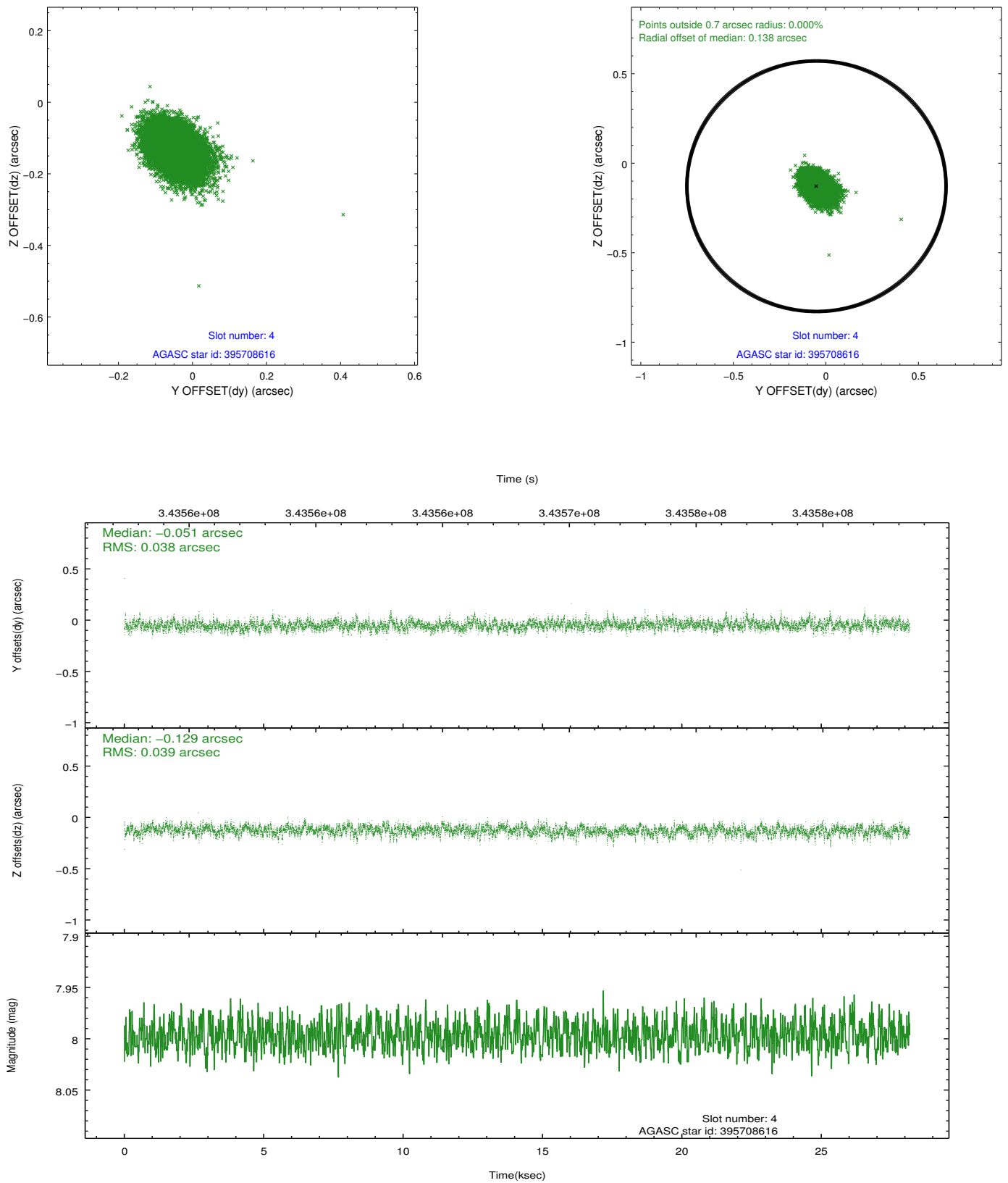
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.96	6871	-0.105	-0.068	0.016	0.027	0.000000	0.000000	-763.41	-1797.44
1	FID	ACIS-S-4	7.04	6871	0.194	0.069	0.025	0.037	0.000000	0.000000	2150.13	111.05
2	FID	ACIS-S-5	7.09	6871	-0.116	0.007	0.016	0.028	0.000000	0.000000	-1816.13	104.80
3	GUIDE	395707376	9.34	13719	0.025	-0.130	0.104	0.166	180.967983	44.858789	1274.02	423.82
4	GUIDE	395708616	8.00	13736	-0.051	-0.129	0.057	0.097	180.101872	44.630343	-747.83	1645.00
5	GUIDE	395708696	8.87	13730	0.029	0.092	0.071	0.116	180.383726	44.624291	-317.51	1065.11
6	GUIDE	395709608	8.35	13741	0.033	0.091	0.062	0.098	181.055130	44.450389	269.13	-671.62
7	GUIDE	395710032	8.80	13730	-0.031	0.079	0.069	0.114	181.512910	44.376001	802.38	-1754.88

2.4 Star Slots

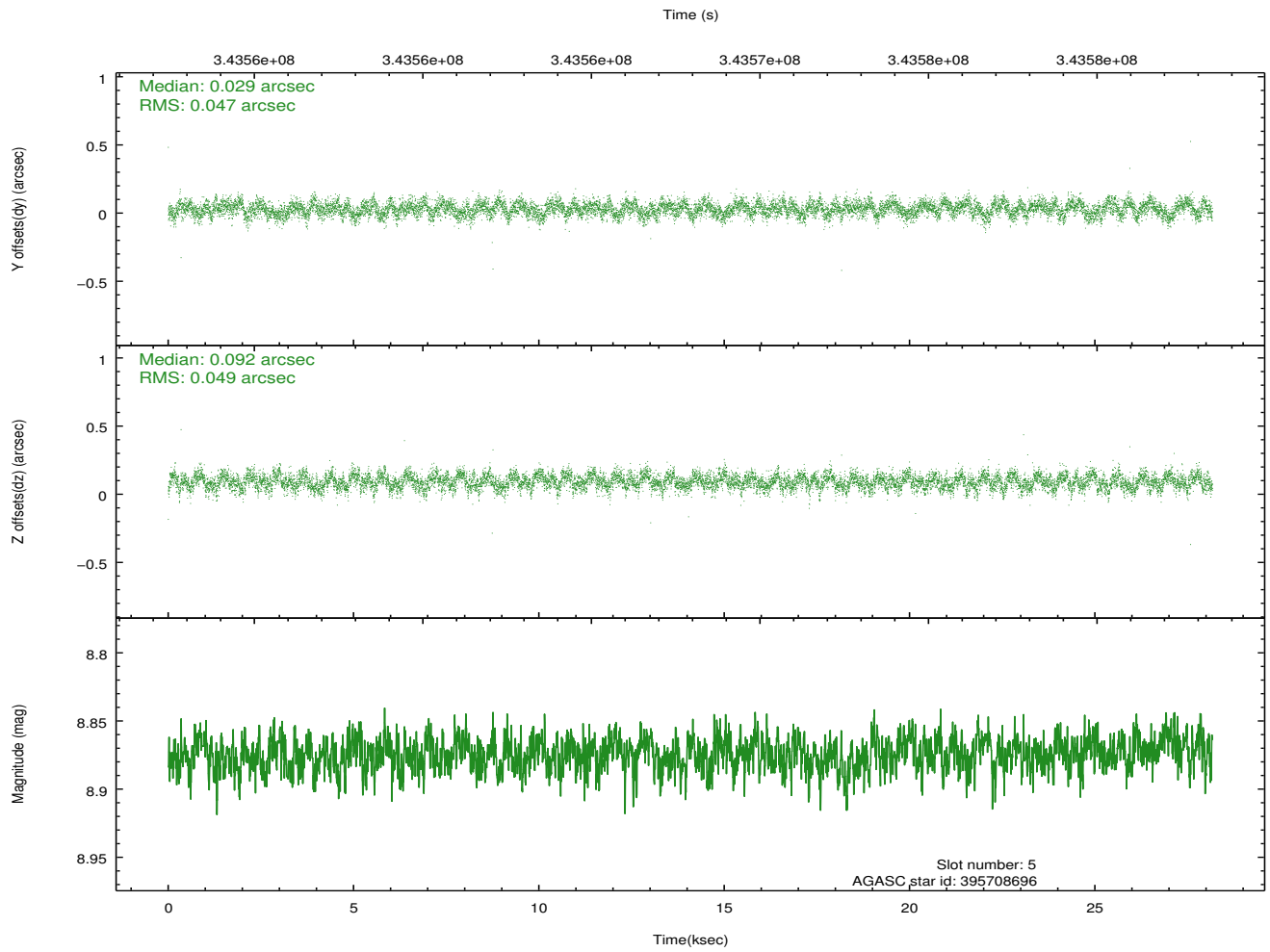
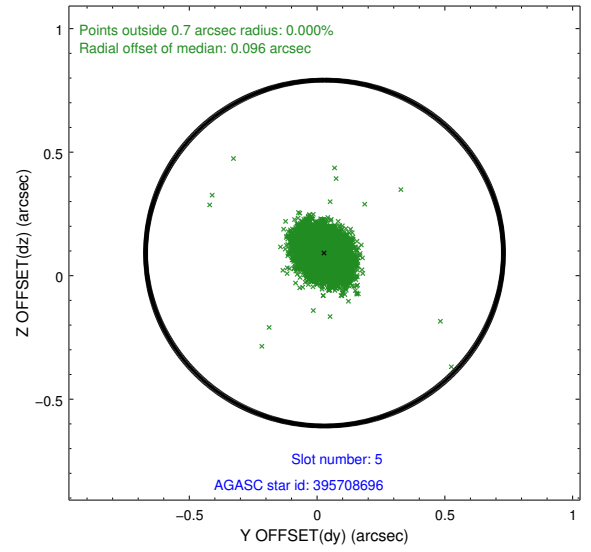
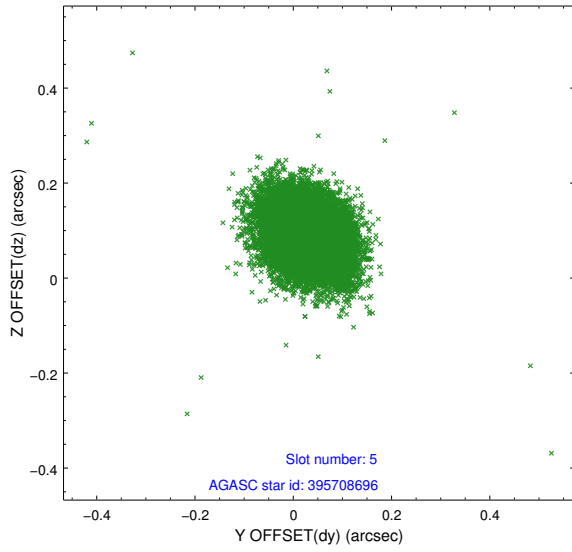
2.4.1 Slot 3



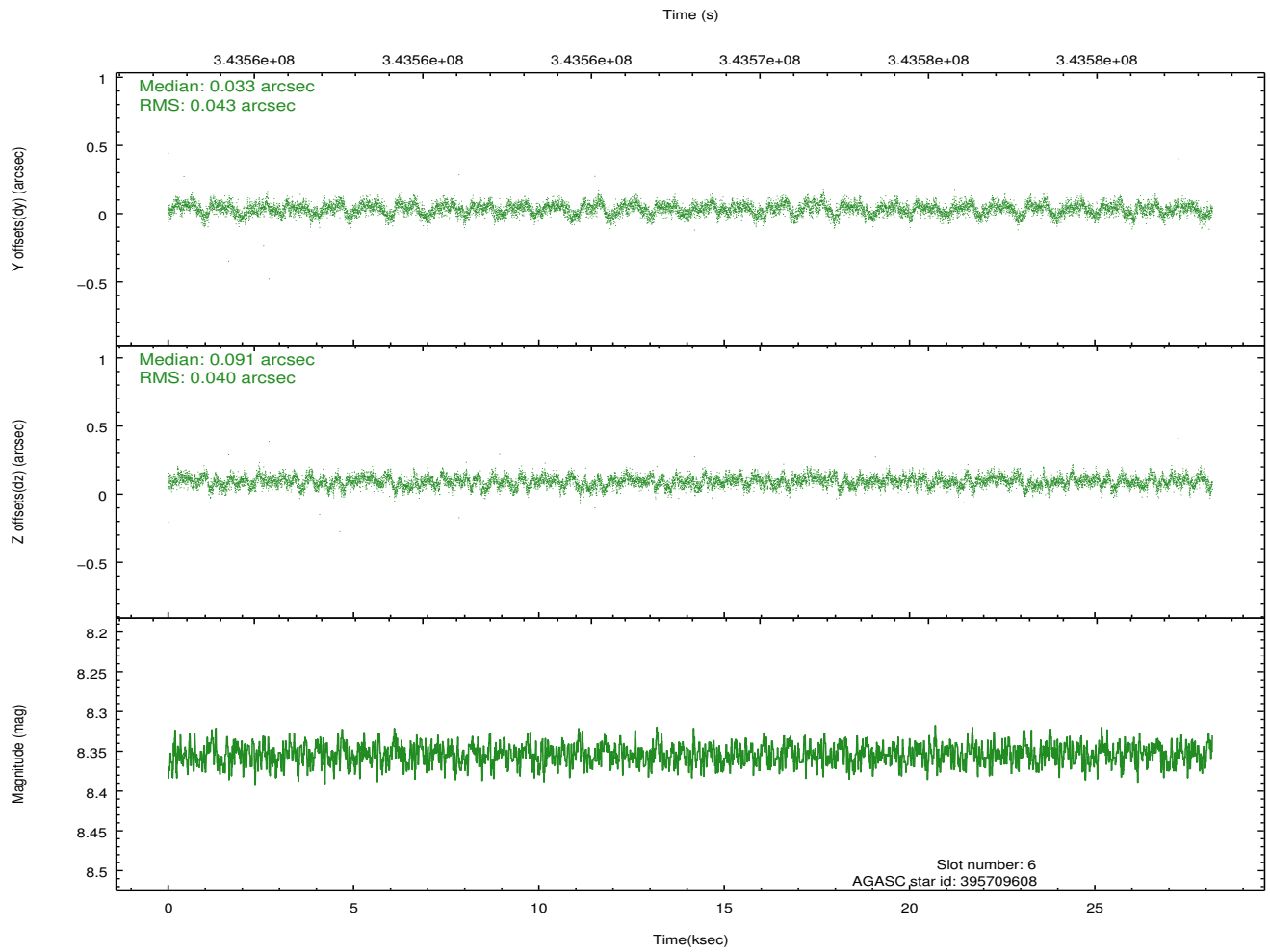
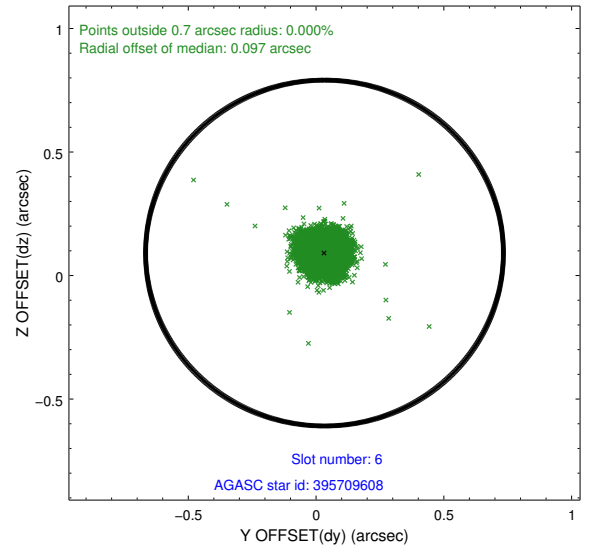
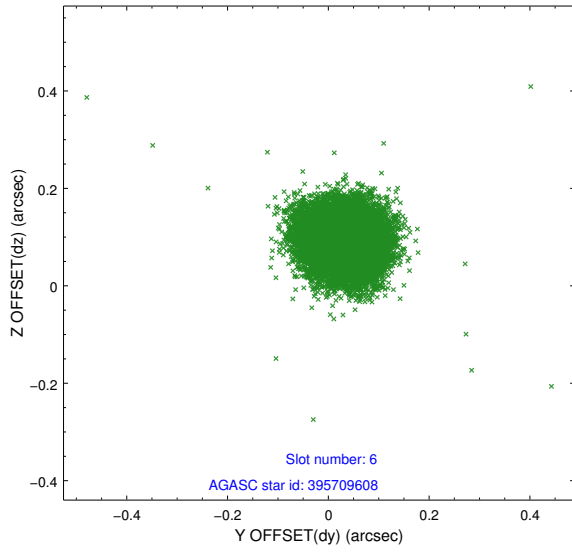
2.4.2 Slot 4



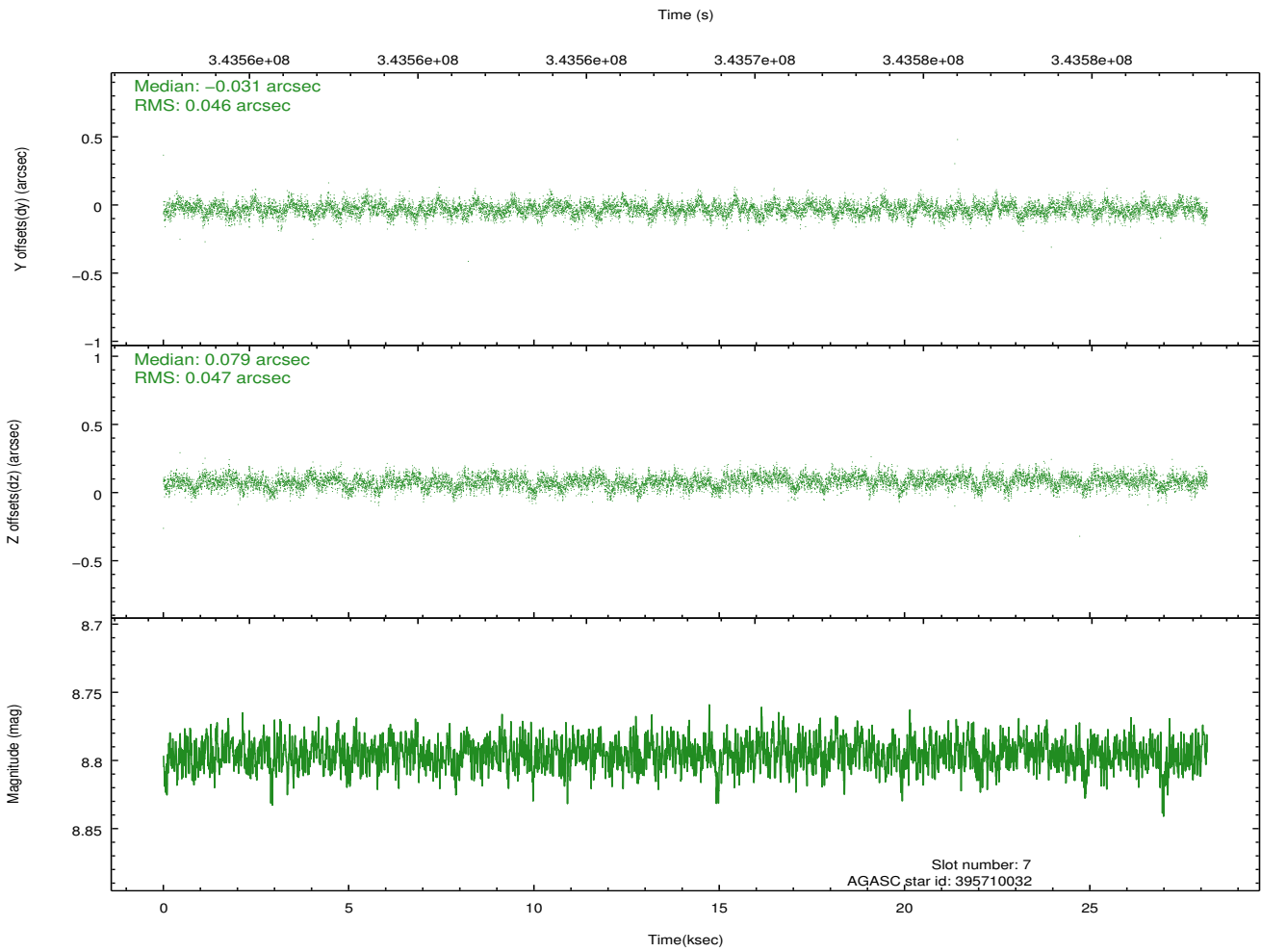
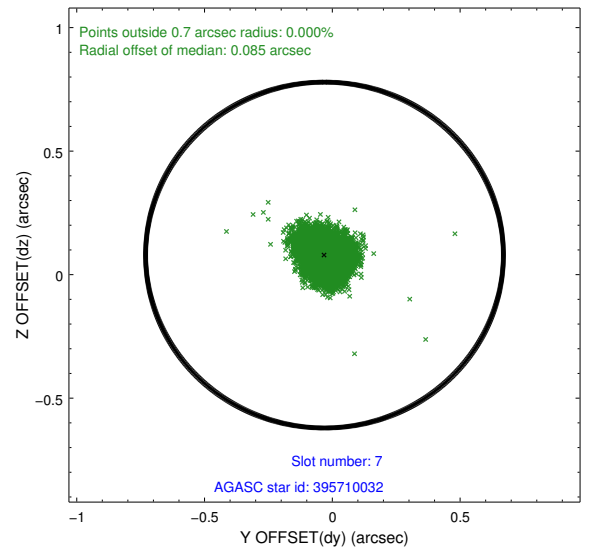
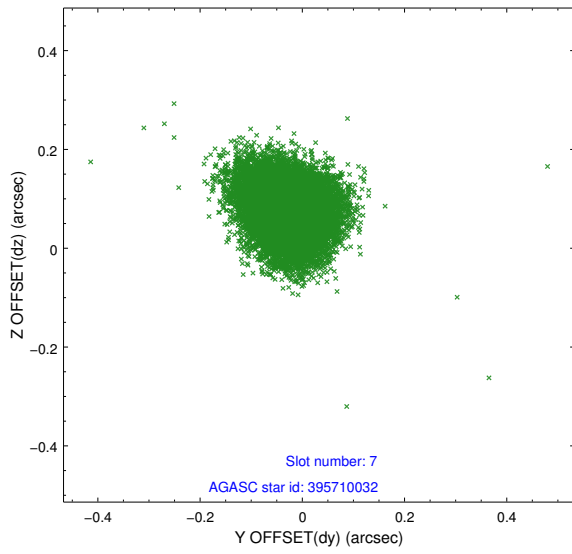
2.4.3 Slot 5



2.4.4 Slot 6

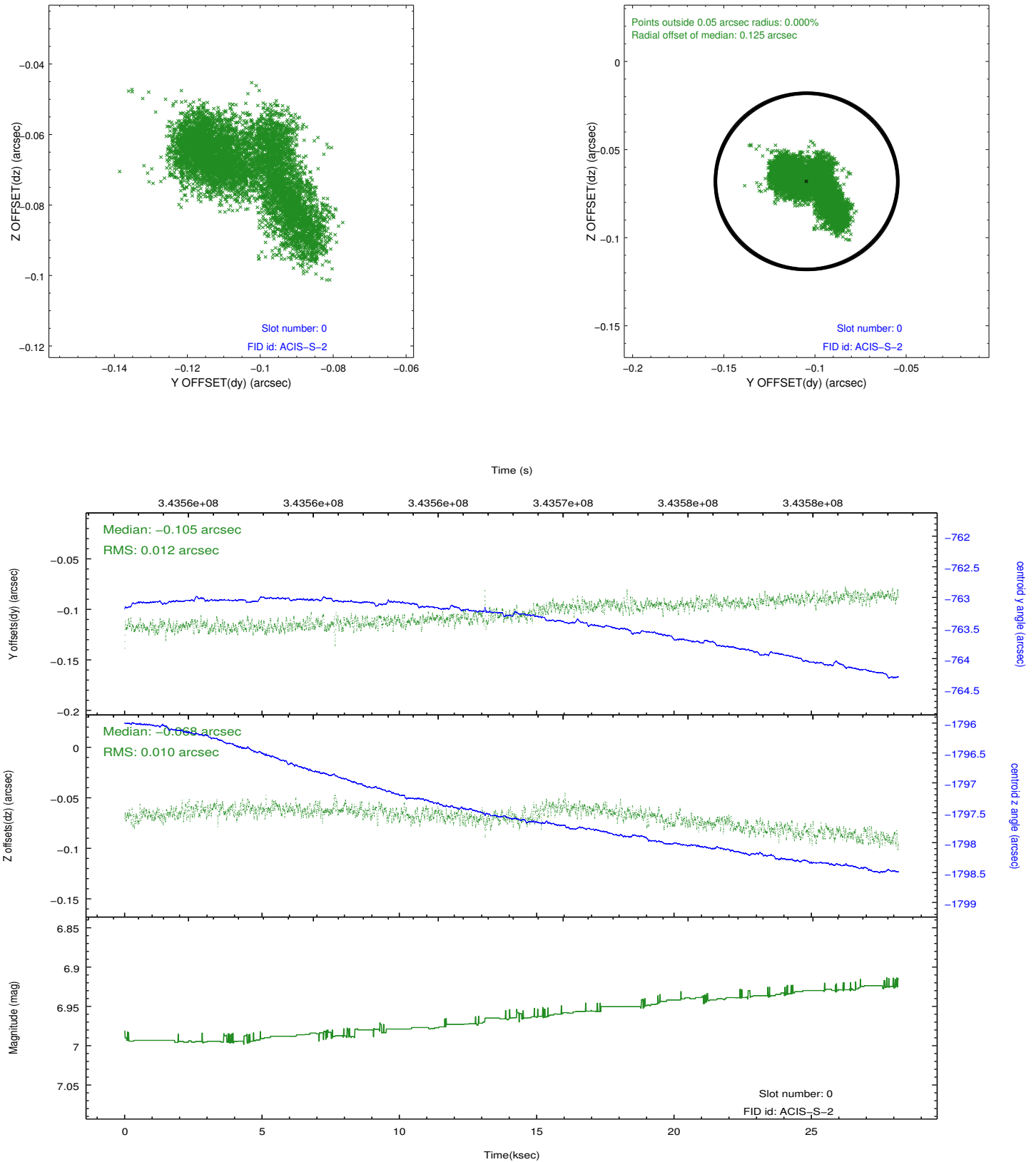


2.4.5 Slot 7

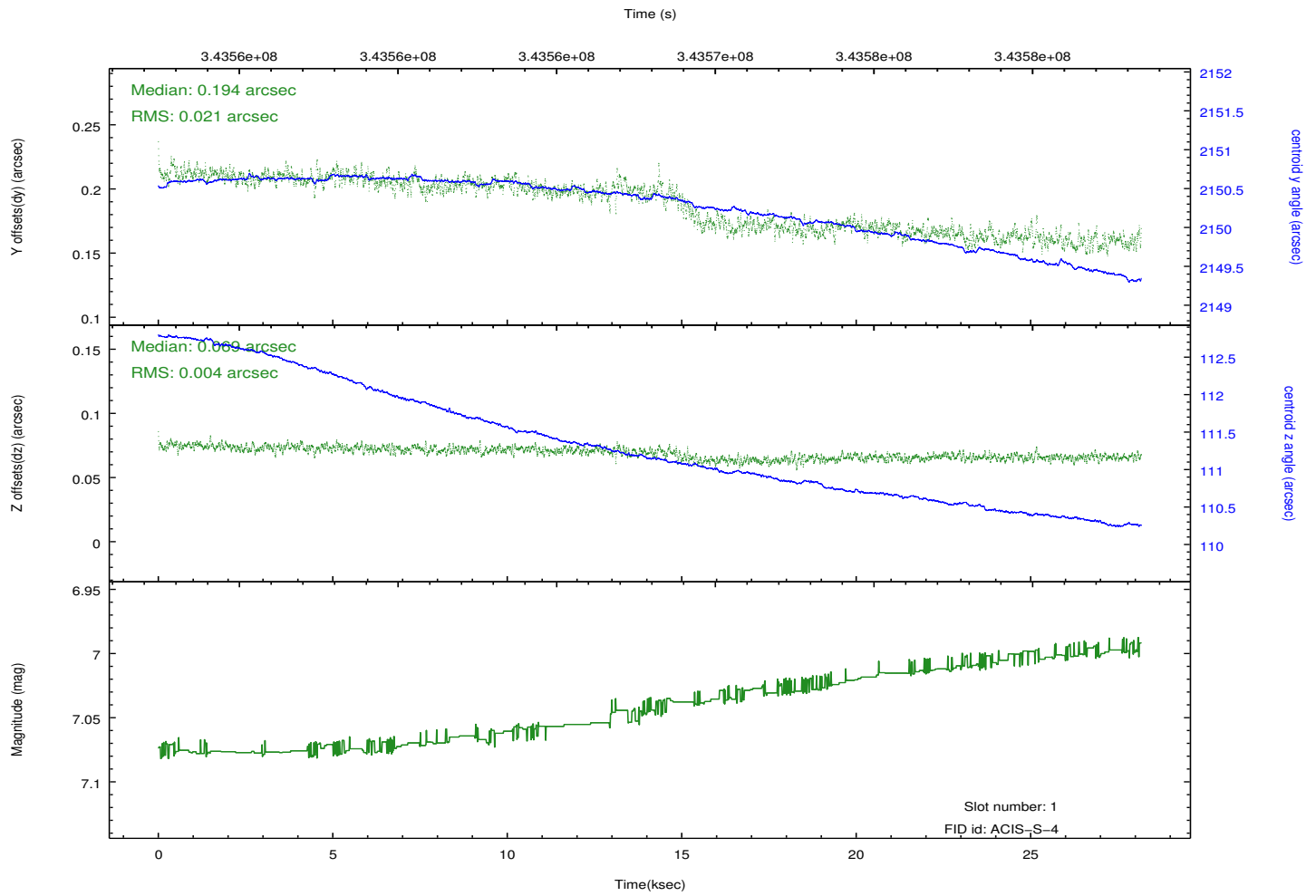
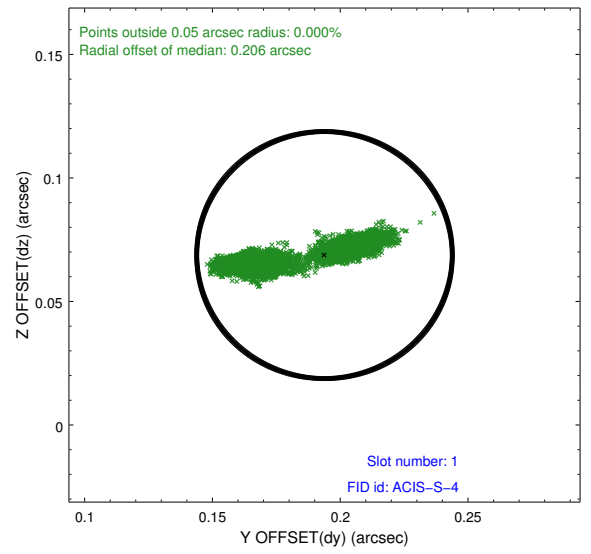
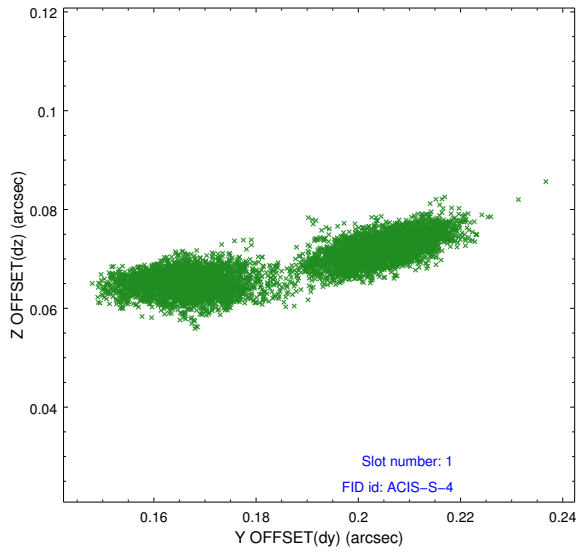


2.5 FID Slots

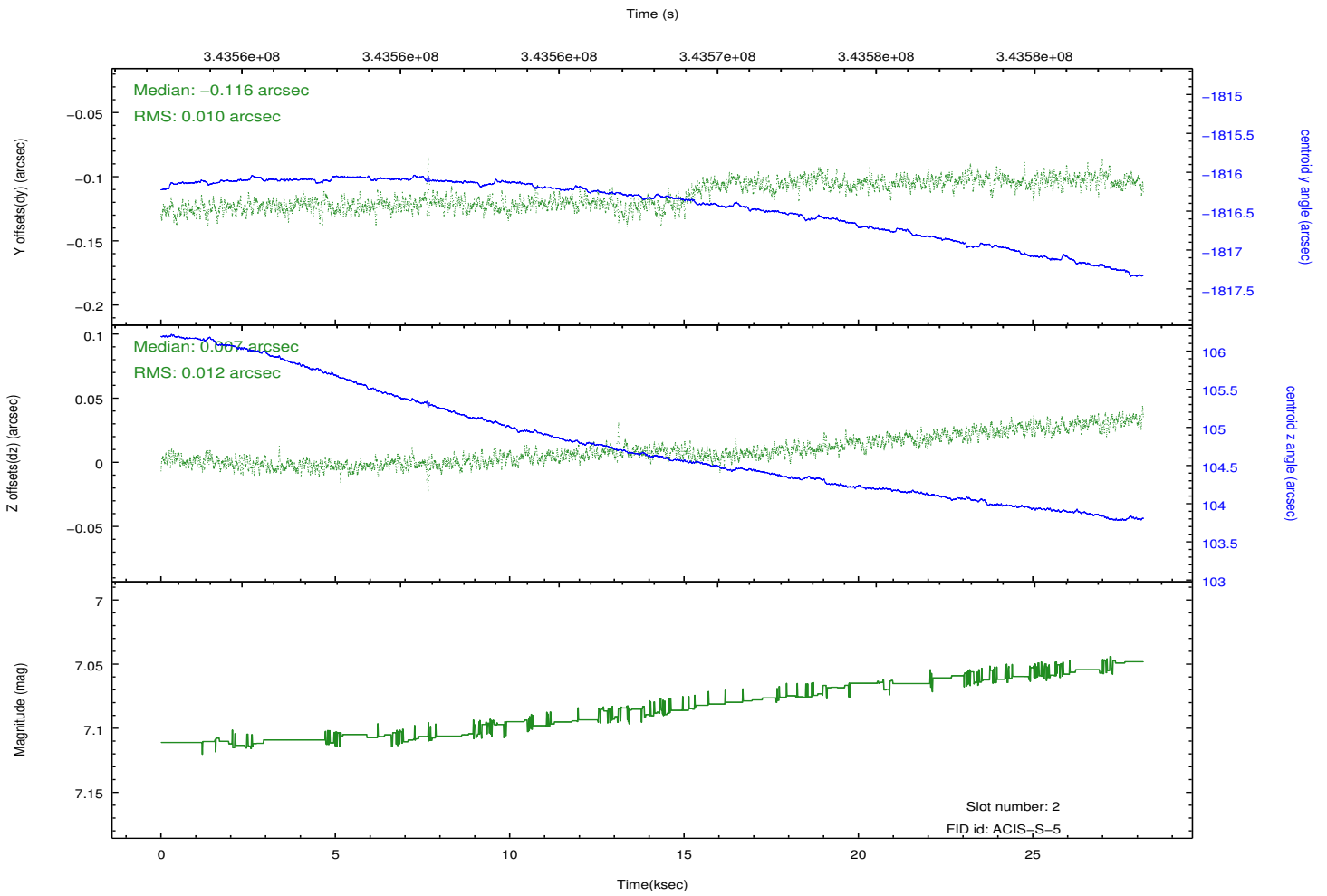
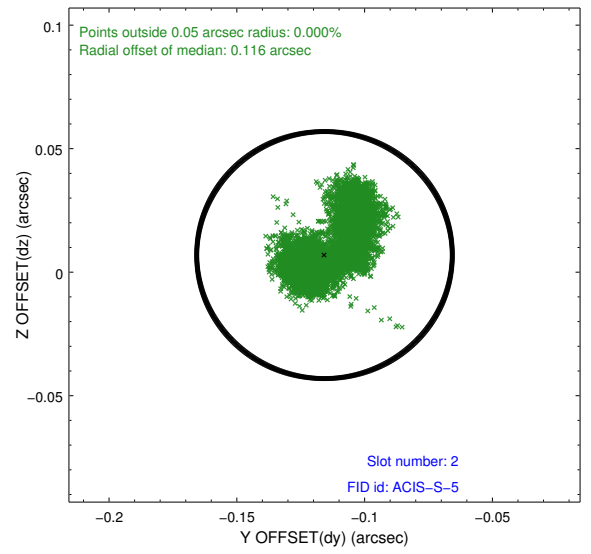
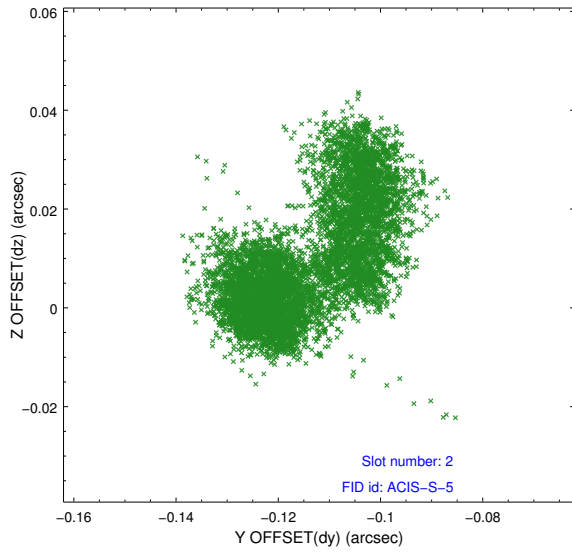
2.5.1 Slot 0



2.5.2 Slot 1

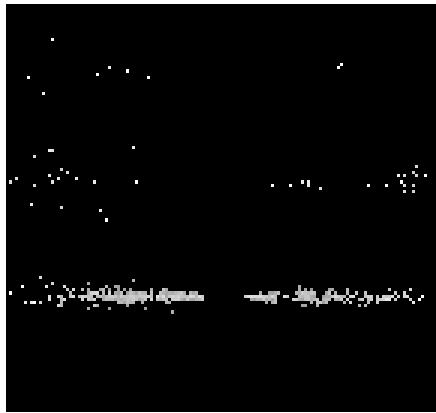


2.5.3 Slot 2

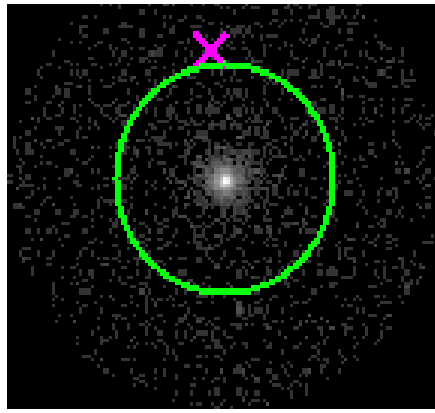


3 Gratings

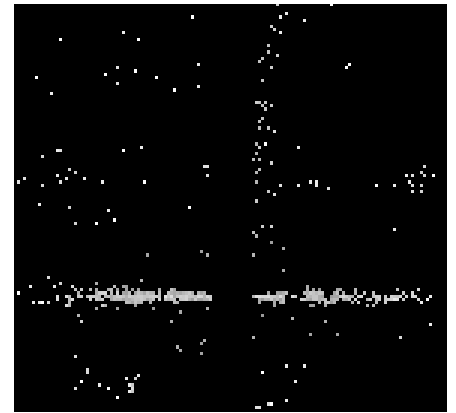
3.1 HEG Arm



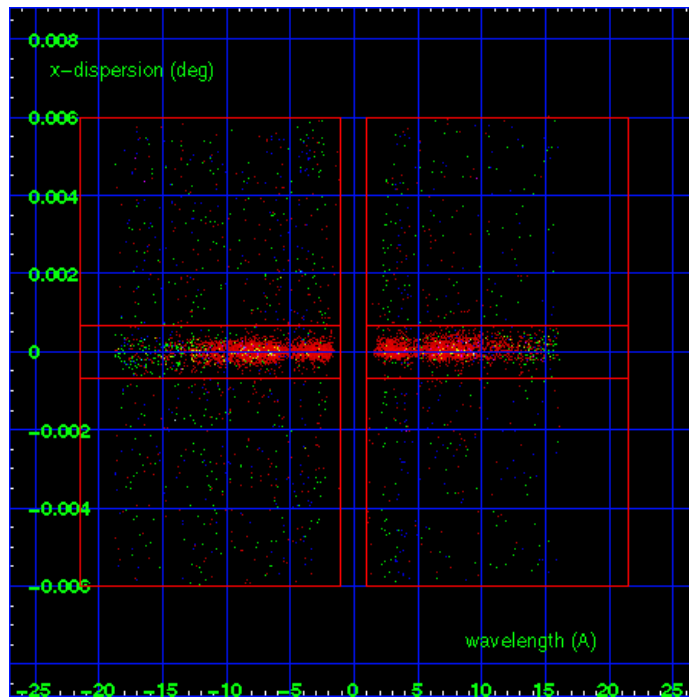
HEG Order Sort 123



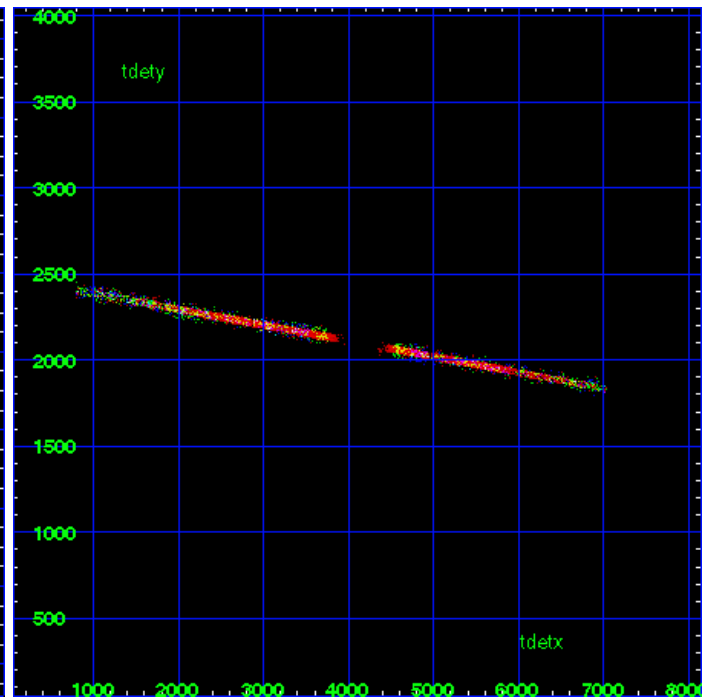
HEG Zero Order



HEG Order Sort ALL

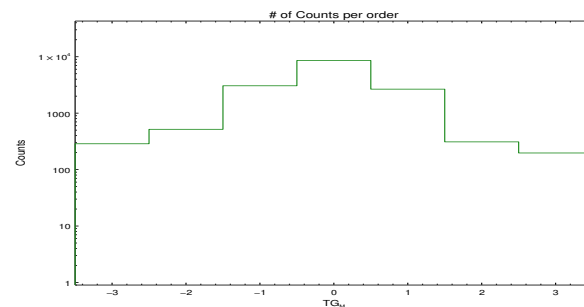


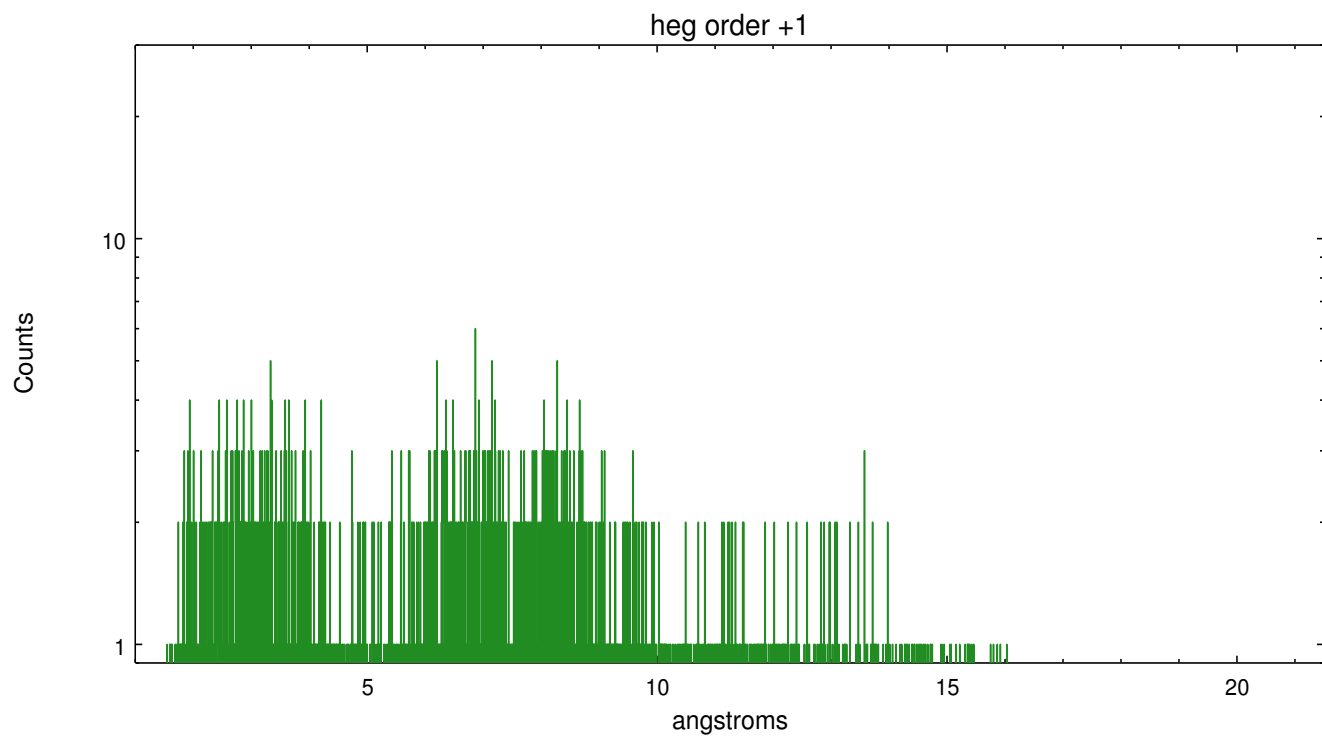
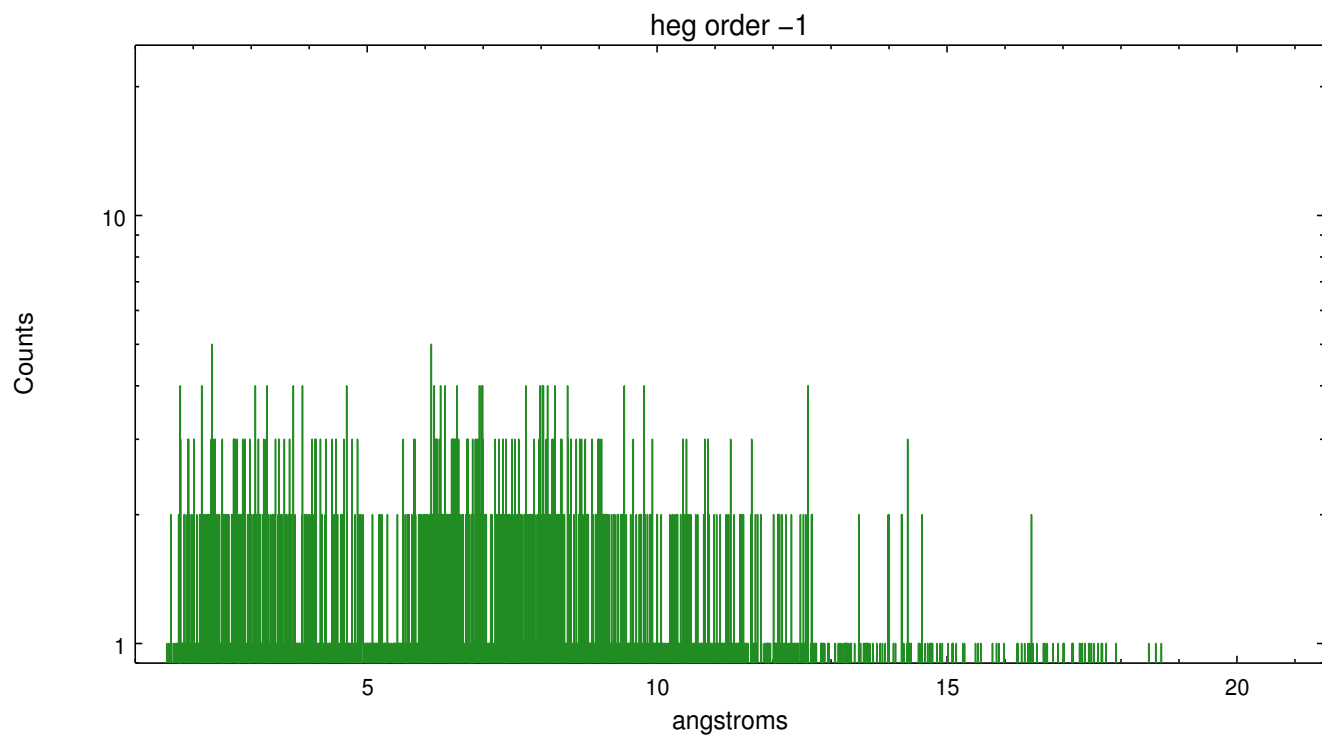
Spot Image HEG



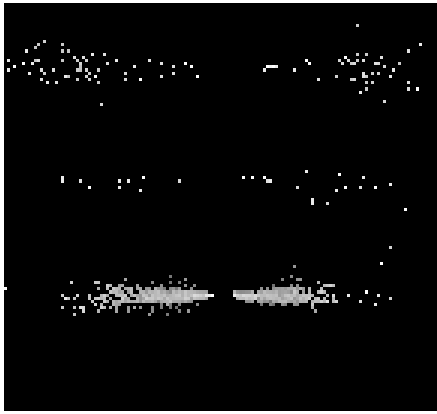
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	287	517	3058	8575	2662	310	197

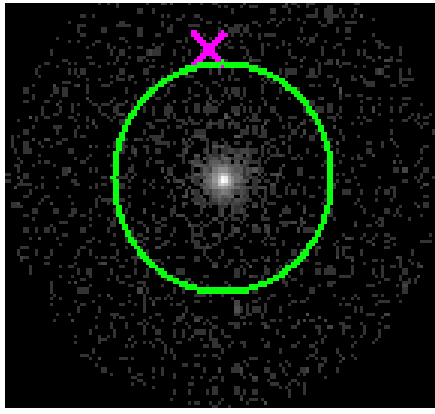




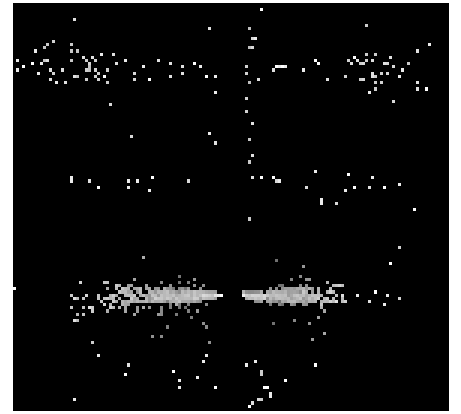
3.2 MEG Arm



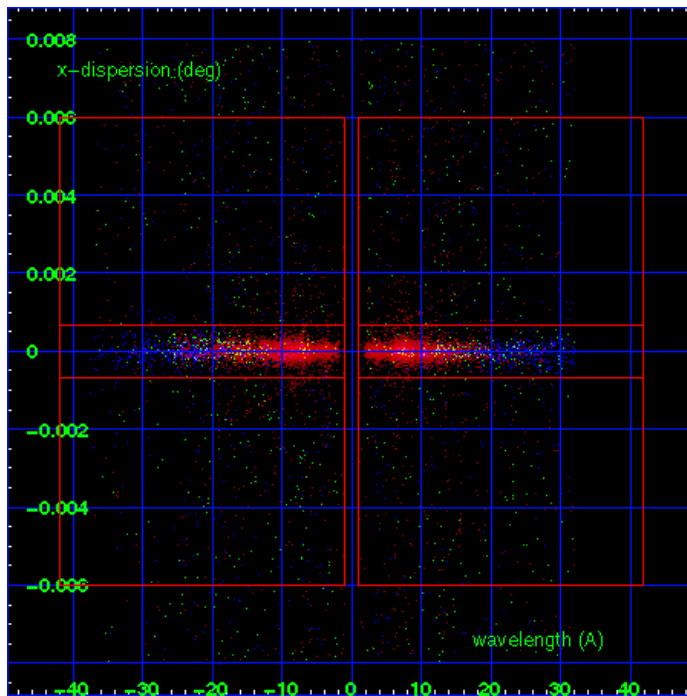
MEG Order Sort 123



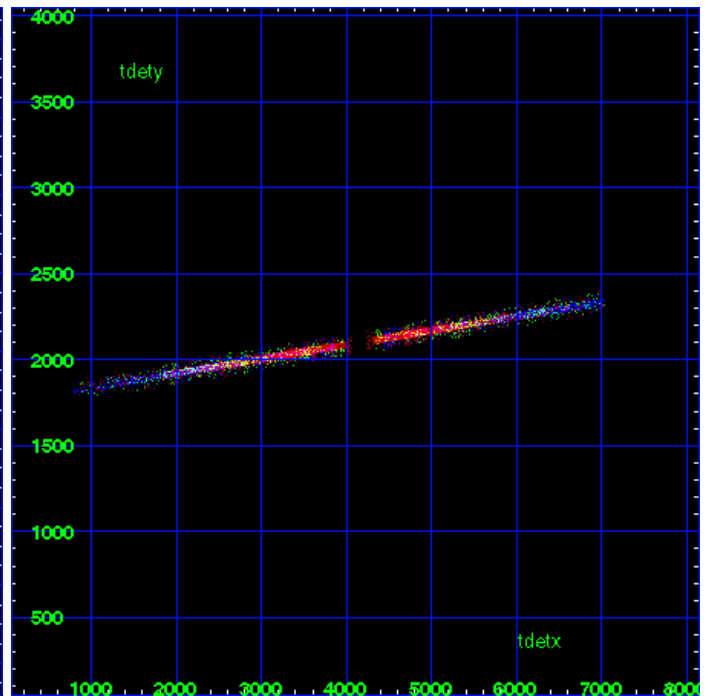
MEG Zero Order



MEG Order Sort ALL

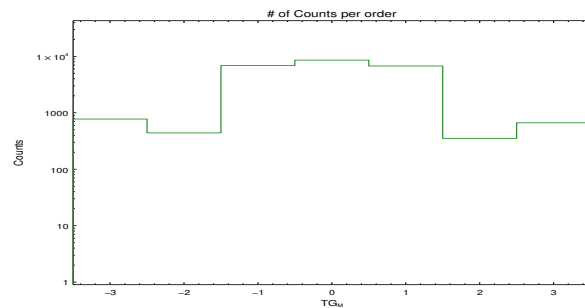


Spot Image MEG

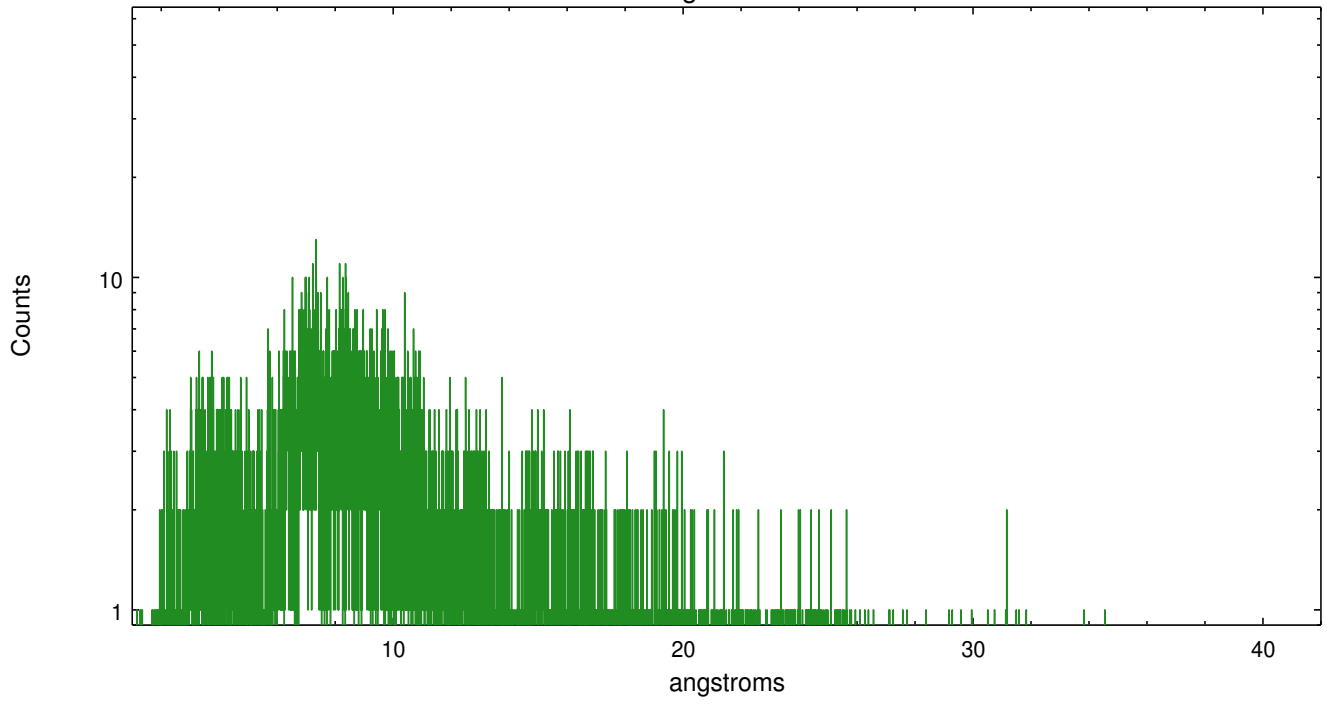


Full Detector MEG

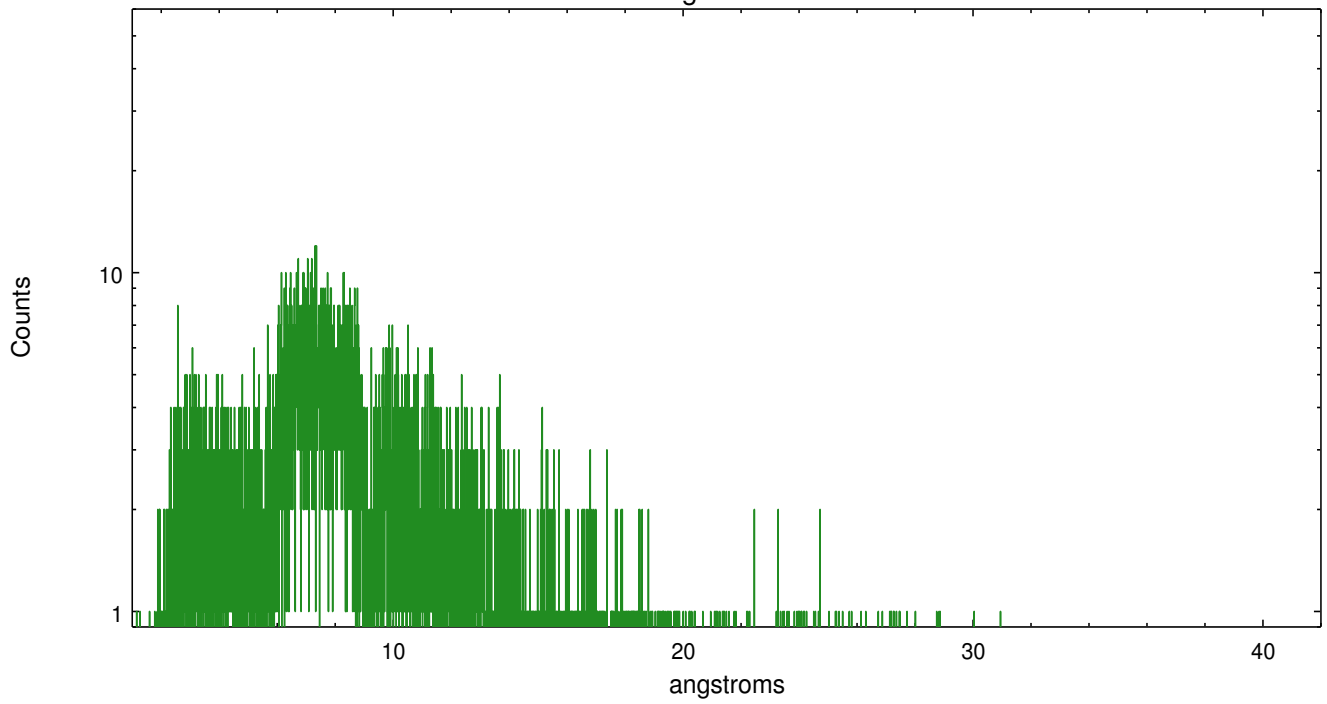
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	775	440	6875	8575	6748	352	665



meg order -1



meg order +1



A Summary

A.1 Status

V&V Scientist	John Houck
V&V Date (YYYY-MM-DD)	2012.05.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.755

A.2 Comments

Joint proposal with HST and Suzaku.=====

Focal plane temperature is warmer than -118.7 C degrees during the first 5-6 ksec of this observation. The ACIS spectral response calibration for the front-illuminated chips is less accurate at these warmer temperatures than it is at -119.7 C. The back-illuminatd chips are not affected at the focal plane temperatures recorded for this observation. Users whose science objectives depend on the most accurate spectral response (i.e.: fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response should not notice an effect.